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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/036,980 | 12/31/2001 | Eric R. White | VIGN1370-1 | 5326 |

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EXAMINER

WU, QING YUAN

ART UNIT PAPER NUMBER

2126

DATE MAILED: 01/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

10/036,980

Applicant(s)

WHITE ET AL.

Examiner

Qing-Yuan Wu

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/24/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/19/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-10, 12-27 are pending in the application.
2. To insure proper consideration and to the extent required by 37 CFR 1.56, applicant is required to update the information hereby incorporated by reference (e.g. serial number of "Extensible Workflow Architecture," see specification, pg. 1, lines 1-3).

Drawings

3. The informal drawings are not of sufficient quality to permit examination. Accordingly, replacement drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to this Office action. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action.

Claim Objections

4. The numbering of claims is not in accordance with 37 CFR 1.126. There is no claim 11 present in the originally filed papers. For examining purpose, claims 12-27 and their dependency will be shift up by one (i.e. claims 12-27 will become 11-26, reference to claim 12 will be treated as reference to 11, and 14 as 13, etc.) and will be address as such in the remainder of this office action. Applicant is reminded to renumber the claims in proper form in the amendment.

5. Claim 20 is objected to because of the following informalities: "generic objection" should read -- generic objects--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 5, 13, and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. The following claim language is indefinite:

- i. As per claims 5, 13, 23, it is uncertain what "an industry standard" is (i.e. what are the industry standard objects for workflow management?).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-2, 5-7, 9-10, 13-15, 17-20, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yaung (U.S. PG Pub 20030023662), in view of Lin et al (hereafter Lin) (U.S. PG Pub 20030005406).

10. As to claim 17, Yaung teaches the invention substantially as claimed including a method for integrating workflow engines comprising:

interfacing with an underlying workflow engine through an associated workflow engine API [564, 560, 580, 582, Fig. 7; pg. 8, paragraph 128] ;

Yaung does not specifically teach generic objects or mapping said set of generic objects to a set of native objects. However, Yaung disclosed translating methods from server side object to native code used by workflow engine [pg. 8, paragraph 128, lines 2-4]. In addition, Lin teaches a workflow/data store API mapping that provides access to vendor specific data store APIs through workflow APIs [Lin, pg. 5, paragraphs 51-54; 420, 434, 430a-c, Fig. 10].

11. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have combined the teaching of Yaung and the teaching of Lin because the teaching of Lin optimized the teaching of Yaung by allowing clients to interface with various vendor specific workflow engines APIs by simply mapping/translating objects that correspond to vendor specific APIs.

12. As to claim 18, Yaung as modified teaches the invention substantially as claimed including:

persistently maintaining a generic process definition object [558, 578, Fig. 7].

(Examiner's interpretation of "persistently maintaining," as any action/non-action that ensure the continue existence of the object since the applicant did not preclude nor define this limitation).

Yaung as modified does not specifically teach, delegating at least a portion of the set of generic objects to a set of corresponding native objects. However, Lin disclosed mapping of commands from workflow APIs to one or more commands in each of the data store APIs [Lin, pg. 5, paragraph 53, lines 4-7]. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to delegate at least a portion of the set of generic objects to a set of corresponding native objects to allow communication between the interfaces.

13. As to claim 19, this claim is rejected for the same reason as claim 17 above.

14. As to claim 20, this claim is rejected for the same reason as claim 17 above. In addition, Yaung as modified does not specifically teach mapping said native result to a generic result usable by a generic object from said set of generic objects. However, it would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have recognized that the workflow related actions and activities requires communications to and from the workflow engine.

15. As to claim 23, Yaung as modified does not specifically teaches wherein in said set of generic objects is based upon an industry standard for workflow management. However, Yaung disclosed service class implementations that provide methods and objects from the same abstract service class [pg. 1, paragraph 13, lines 5-7]. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have recognized that the generic object have to be based upon an industry standard (i.e. standards promulgated by the Workflow

Management Coalition are well known in the art) for workflow management in order to allow the public API or workflow/data store API to overcome the restriction due to the different vendor implementations (i.e. to allow maximum compatibility between generic objects and proprietary objects).

16. As to claims 24-25 these claims are rejected for the same reason as claim 23 above.

17. As to claim 1, this claim is rejected for the same reason as claim 17 above. In addition, Young as modified teaches a public application program interface [Lin, pg. 5, paragraph 51, lines 7-8; paragraph 53, line 1; 422, Fig. 10];

Young as modified does not specifically teach, a plurality of adapters, each adapter configured to interface with a workflow engine API. However, Lin disclosed a workflow/data store API mapping that provides a correspondence of the workflow APIs to APIs in each of the data store APIs [Lin, pg. 5, paragraph 53, lines 2-4; 434, Fig. 10]. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have recognized that the teaching of Lin accomplished the functionality of allowing an intermediate interface (i.e. adapters, workflow/data store API) to provide mapping between different component interfaces.

18. As to claim 2, this claim is rejected for the same reason as claim 1 above. In addition, Young as modified does not specifically teach a generic process definition object or native process definition object. However, Young disclosed methods invoked on the workflow server from the workflow service object are translated by a program interface to native code used by

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workflow engine [pg. 8, paragraph 128, lines 2-4]. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have recognized that the method calls could be calls used to invoke process definition objects in the workflow engine.

19. As to claims 5-7, these are system claims that correspond to method claims 23-25.

Therefore, they are rejected for the same reason as claims 23-25 above.

20. As to claim 9, this claim is rejected for the same reason as claims 1 and 17 above. In addition, Yaung as modified teaches a first workflow engine [560, Fig. 7], a second workflow engine [582, Fig. 7];

21. As to claim 10, this claim is rejected for the same reason as claim 2 above.

22. As to claims 13-15, these are system claims that correspond to method claims 23-25. Therefore, they are rejected for the same reason as claims 23-25 above.

23. Claims 3-4, 8, 11-12, 16, 21-22, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yaung, in view of Lin as applied to claim 23 above, further in view of Parnell et al (hereafter Parnell) (U.S. Patent 6,647,396).

24. As to claims 21-22, Yaung as modified does not specifically teach wherein said set of generic objects further comprises a payload object, and wherein said payload object associates a

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set of content items with a process instance. However, Parnell teaches applying content management to workflows [Parnell, col. 3, lines 5-12]. It would have been obvious to one of an ordinary skill in the art at the time the invention was made, to have include a payload object that associate a set of content items with a process instance given that the content might have been access previously or will be access multiple times.

25. As to claim 26, this claim is rejected for the same as claims 21-22, and 23 above.

26. As to claims 3-4, these are system claims that correspond to method claims 21-22.

Therefore, they are rejected for the same reason as claims 21-22 above.

27. As to claim 8, this is a system claim that corresponds to method claim 26. Therefore, it is rejected for the same reason as claim 26 above.

28. As to claims 11-12, these are system claims that correspond to method claims 21-22.

Therefore, they are rejected for the same reason as claims 21-22 above.

29. As to claim 16, this is a system claim that corresponds to method claim 26. Therefore, it is rejected for the same reason as claim 26 above.

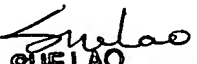
30. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

"Workflow Management Coalition The Workflow Reference Manual," by David Hollingsworth.

31. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qing-Yuan Wu whose telephone number is (571) 272-3776. The examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


SUE LAO
PRIMARY EXAMINER

Qing-Yuan Wu

Examiner

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